

KCC 4760 (K-C 13,369)
PATENTREMARKS

Claims 1, 2, 5, 14 and 26 are canceled, claims 3, 4, 6-8, 11, 15, 16, 20, 27, 28, 30, 33 and 35 are amended, and claims 36-41 are added herein. Claims 3, 4, 6-13, 15-25 and 27-41 will be pending upon entry of the amendment.

The following remarks are responsive to the Office action dated January 30, 2004.

I. Response to Rejection of ClaimsClaim 20

Claim 20 as amended herein is directed to a disposable absorbent article for personal wear. The absorbent article is particularly useful in reducing or eliminating leakage resulting from a surge of liquid waste that is discharged by the wearer. Specifically the article comprises, *inter alia*:

- a) an inner layer . . . , at least a portion of the inner layer being liquid permeable;
- b) an outer layer in opposed relation with the inner layer;
- c) an absorbent body disposed between the inner layer and the outer layer . . . ; and
- d) a pair of containment flaps secured to the inner layer of the article in spaced relation with each other, each flap having a base secured to the inner layer of the article and a distal end, at least a portion of the distal end being movable relative to the base to a position in which the flap is spaced from the inner layer of the article, the containment flaps each comprise:

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1) a first layer extending from the base of the flap to the distal end of the flap, the flap first layer having a lateral surface and a medial surface; and

2) a liquid permeable second layer at least partially surrounding the lateral and medial surfaces of the flap first layer, the flap second layer being free from fixed engagement with at least a portion of the medial surface of the flap first layer to define a surge chamber therebetween for receiving liquid body waste, the absorbent body and liquid permeable portion of the inner layer of the article being at least in part disposed between the surge chamber and the outer layer of the article.

Claim 20 as amended is submitted to be unanticipated by and patentable over the references of record, and in particularly U.S. Patent No. 6,186,996 (Martin), in that whether considered alone or in combination the references fail to show or suggest an absorbent article having containment flaps comprising a first layer, a liquid permeable second layer surrounding a lateral and medial surface of the flap first layer and defining along with the flap first layer a surge chamber wherein an absorbent body and inner layer of the article are in part disposed between the surge chamber and an outer layer of the article.

Martin discloses a disposable absorbent sanitary article that includes, with particular reference to Fig. 5 as relied upon in the Office action, a flap (28'') secured to a central strip (22'') of a protection sheet (18'') at the side edge of an absorbent (4). A covering sheet (3) is secured to the protection sheet (18'') laterally outward of the flap (28'') and to the distal edge of the

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flap (28'') at attachment point (28'') to form a longitudinal tunnel (27) laterally outward of the absorbent pad (4). As is clearly shown in Fig. 5, the covering sheet (3) does not extend in opposed relationship with the inward facing surface of the flap (28'').

Martin clearly fails to show or suggest a flap second layer surrounding both a lateral and medial surface of a flap first layer. The Office action (at item 5) mischaracterizes the flap (28'') of Martin as being analogous to first flap layer recited as recited in claim 20 of the present application, with a lateral surface L (in drawings provided with the Office action) facing laterally inward of the article and a medial surface M facing laterally outward. It is clear from both the drawings and specification of the present application that the term lateral surface recited in claim 20 refers to the outward facing surface of the flap first layer and the medial surface recited in claim 20 refers to the laterally inward facing surface of the flap first layer. This is consistent with the dictionary definition of medial, which means "of or pertaining to the middle."

In any event, none of the drawings of Martin shows the covering sheet (3) surrounding any portion of the laterally inward facing surface of the flap (28''), whether one considers this surface to be a lateral or a medial surface. While the covering sheet does extend laterally inward from the distal end of the flap, it does not extend down along any portion of the inward facing surface of the flap. Martin also lacks any disclosure that a portion of the inward facing surface of the flap (28'') is surrounded by the covering sheet (3). Thus, Martin fails to show or suggest both the lateral and medial surface of a flap first layer being surrounded by a flap second layer.

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Moreover, the tunnel 27 disclosed in Martin and shown in the drawings thereof is disposed laterally outward of the absorbent pad (4). That is, the absorbent pad is not disposed between the tunnel (27) and the backsheet (2) of the article. Thus, Martin further fails to show or suggest that an absorbent body and inner layer of an absorbent article disposed between a flap surge chamber and an outer cover of the article as recited in amended claim 20.

The other references of record similarly fail to show or suggest all of the recitations of claim 20.

For these reasons, claim 20 as amended herein is submitted to be patentable over the references of record.

Claims 21-25 and 34 depend directly or indirectly from claim 20 and are submitted to be patentable over the references of record for the same reasons as claim 20. It is additionally noted that claim 24 further recites that the flap second layer overlays substantially the entire lateral surface of the flap first layer. Under the Office's mischaracterization of the inner facing surface of the flap (28') of Martin as constituting a lateral surface, the covering sheet (3) clearly does not overlay substantially the entire lateral surface of the flap. Thus, claim 24 is further submitted to be patentable over the references of record for these additional reasons.

Claim 28

Claim 28 is directed to a disposable absorbent article for personal wear comprising, *inter alia*:

a liner . . .;
an outer cover . . .;
an absorbent body disposed between the liner and outer cover . . .; and

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a pair of containment flaps secured to the liner in spaced relation with each other, each of said flaps comprising:

a first layer extending from a base of the flap adjacent the liner to a distal end of the flap, at least a portion of the distal end of the flap being spaced from the liner, said flap first layer having a lateral surface and a medial surface;

a liquid permeable second layer overlaying the lateral surface of the flap first layer from the base of the flap to the distal end of the flap and being secured to said lateral surface, the flap second layer extending in opposed relation with the medial surface of the flap first layer from the distal end of the flap to the liner, the flap second layer being secured to the medial surface of the flap first layer at a first seam adjacent the distal end of the flap and being further secured to the liner in laterally inward spaced relation with the base of the flap so that the liner, the flap first layer extending between the seam and the base, and the flap second layer extending between the seam and the liner together form a surge chamber for receiving liquid body waste; and

an elastic member secured between the flap first layer and the flap second layer . . .

Claim 28 is submitted to be nonobvious and patentable over the references of record, and in particular FR2699813 ('813) in view of U.S. Patent No. 5,993,433 (St. Louis et al.), in that whether considered alone or in combination the references fail to show or suggest an absorbent article having containment flaps comprising a first layer and a liquid permeable second layer overlaying the lateral surface of the flap first layer from the base of the flap to

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the distal end of the flap and being secured to the lateral surface of the flap first layer, and wherein the flap second layer is also secured to the medial surface of the flap first layer at a first seam adjacent the distal end of the flap.

The '813 reference discloses an absorbent hygiene article having (with reference to Fig. 3 thereof) longitudinal air circulation bands (14) fixed at the longitudinal side (12) of an absorbent pad (3). Each circulation band (14) includes a liquid-impermeable strip (24) secured to a nonwoven sheet (6) and extending outward therefrom to a distal end. The circulation band (14) extends up along the outer surface of the strip (24) from the base of the strip to the distal end thereof. The strip is disclosed as being fixed to the circulation band (14). As is also clearly shown in Fig. 3, the circulation further extends laterally inward of and downward relative to the distal end of the strip (24) so that the circulation band (14) does not even contact the inner facing surface of the strip (24).

The '813 reference lacks any disclosure or suggestion that the circulation band (14) can be in contact with, let alone be secured to, the inward facing surface of the strip (24). Thus, the '813 reference clearly fails to show or otherwise even suggest a liquid permeable second flap layer that is secured to both a lateral surface and a medial surface of a flap first layer as recited in claim 28. Applicants respectfully disagree with the Office's characterization of the circulation band (14) as being secured to a medial surface (designated M in the drawings received from the Office) of the strip (24) at the point designated S by the Office. There is clearly no securement to the medial (e.g., the inner facing) surface of the strip at point S, only to the lateral surface designated L by the Office.

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St. Louis et al. disclose a dual flap configuration in which a pair of flaps are disposed on each of the left and right hand sides of an absorbent article. The outermost flap on each side comprises a barrier layer (174) overlaid on each surface by a flap fabric layer (176). St. Louis et al. fail to disclose or otherwise even suggest securing the fabric layer (176) to the liner (e.g., (28)) in spaced relationship with the barrier layer (176) to thereby form a surge chamber as recited in claim 28.

Moreover, there is no teaching found in the '813 reference or St. Louis et al. that would motivate one skilled in the art to secure a liquid permeable second flap layer to both a lateral surface and a medial surface of a first flap layer. That is, one would not be motivated by either of the references to modify the flap arrangement of the '813 reference to secure the circulation band (14) of the '813 reference to the inner facing surface of the strip (24).

The other references of record similarly fail to show or suggest the combination of elements recited in claim 28.

For these reasons, claim 28 is submitted to be nonobvious and patentable over the references of record.

Claim 29 and new claim 40 depend directly from claim 28 and are submitted to be patentable over the references of record for the same reasons as claim 28. Moreover new claim 40 further recites that the absorbent body and liquid permeable portion of the liner of the article are at least in part disposed between the surge chamber and the outer cover of the article. Both the '813 reference and St. Louis et al. disclose flap arrangements in which the flaps are located laterally outward of the absorbent body side edge. Thus, each of the references fail to disclose the absorbent body disposed between a surge chamber and outer cover of the article.

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Consequently, a combination of the references would further fail to disclose such a feature. For these additional reasons, new claim 40 is further submitted to be patentable over the references of record.

Claim 30

Claim 30 as amended herein is directed to a method of manufacturing toilet training pants comprising:

securing an absorbent body between a liner and an outer cover and securing the liner to the outer cover about a periphery of the absorbent body, the liner being adapted for contiguity with the wearer's skin and at least in part being liquid permeable, said liner and outer cover together defining an anterior side, a crotch region and a posterior side of the training pants;

securing front and rear side panels respectively to the anterior and posterior sides of the training pants to extend laterally outward from the liner and outer cover, and securing adjacent front and rear side panels together so that the side panels, together with the anterior side, crotch region and posterior side of the pants form a central waist opening and a pair of leg openings of the training pants, the crotch region being disposed between the leg openings;

securing a pair of containment flaps to the liner in spaced relation with each other, each of said flaps being formed by:

securing a first layer of the flap to the liner to define a base of the flap;

overlaying a liquid permeable second layer over a lateral surface of the flap first layer from the base of the flap to a distal end thereof;

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securing said flap second layer to the lateral surface of the flap first layer;

wrapping the flap second layer around the distal end of the flap;

overlaying the flap second layer over a medial surface of the flap first layer from the distal end of the flap to the liner;

securing the flap second layer to the liner in laterally inward spaced relation with the base of the flap so that the liner, the medial surface of the flap first layer extending between the distal end of the flap and the base, and the flap second layer extending between the distal end of the flap and the liner together form a surge chamber for receiving liquid body waste, the absorbent body and liner being at least in part disposed between the surge chamber and the outer cover; and

securing an elastic member between the flap first layer and the flap second layer to bias the distal end of the flap to a position in which the distal end is spaced from the liner.

Claim 30 is submitted to be nonobvious in view of and patentable over the references of record, and in particular the '813 reference, St. Louis et al. and U.S. Patent No. 5,591,155 (Nishikawa et al.), in that whether considered alone or in combination the references fail to disclose the combination of steps recited in claim 30, including the step of securing the flap second layer to the liner in laterally inward spaced relation with the base of the flap to form a surge chamber with the absorbent body and liner at least in part disposed between the surface chamber and the outer cover of the absorbent article.

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Applicants reiterate their position set forth above in connection with claim 28 that there is no teaching found in either the '813 reference or St. Louis et al. that would motivate one skilled in the art to combine the references. Specifically, St. Louis et al. teaches overlaying the barrier layer with the fabric layer whereby no surge chamber is formed. In contrast, the '813 reference teaches spacing the circulation band from the inner facing surface of the strip to define an aeration tunnel therebetween. Thus, a combination of St. Louis et al. and the '813 reference cannot be made without doing express violence to the teachings of the '813 reference (i.e., eliminating the aeration tunnel specifically taught by the '813 reference).

Moreover, the '813 reference, St. Louis et al. and Nishikawa et al. each fail to show or even suggest arranging the flap second layer so that the absorbent body and liner are at least in part disposed between the formed surge chamber and the outer cover of the article. Thus, a combination of the references would similarly fail to disclose or suggest such a feature.

The other references of record also fail to show or suggest the combination of steps recited in amended claim 30.

For these reasons, amended claim 30 is submitted to be patentable over the references of record.

Claims 31 and 32 depend directly from claim 30 and are submitted to be patentable over the references of record for the same reasons as claim 30.

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New claim 36 is similar to original claim 2 and is directed to a disposable absorbent article for personal wear comprising, *inter alia*:

an inner layer . . .;

an outer layer . . .;

an absorbent body disposed between the inner layer and the outer layer . . .; and

a pair of containment flaps on said article in spaced relation with each other, each flap having a base secured to the article and a distal end, at least a portion of the distal end being movable relative to said base to a position in which said distal end is spaced from the inner layer of said article, said containment flaps each comprising:

a first layer extending from the base of the flap to the distal end of said flap, said flap first layer having a lateral surface, a medial surface; and

a liquid permeable second layer in opposed relation with the medial surface of the flap first layer, said flap second layer being free from fixed engagement with at least a portion of the medial surface of said flap first layer to define a surge chamber therebetween for receiving liquid body waste, the flap second layer having a width greater than a width of said portion of the medial surface

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of the flap first layer and being secured to at least one of the flap first layer and the inner layer of the article whereby the absorbent body and liquid permeable portion of the inner layer of said article are at least in part disposed between the surge chamber and the outer layer of said article.

Claim 36 is submitted to be patentable over the references of record, and in particular the '813 reference and St. Louis et al. as relied upon at item 7 of the Office action, in that whether considered alone or in combination the references fail to disclose an absorbent article as recited in claim 36 including containments flaps each comprising a first layer and a liquid permeable second layer having a width greater than a width of a portion of a medial surface of the flap first layer along which the second layer is free from fixed engagement with the medial surface of the flap first layer.

The "width" of the flap second layer and the "width" of the recited portion of the medial surface of the flap first layer are defined in applicants' specification as being measured relative to the base of the flap when the flap is in its upright orientation. That is, the width measurement is generally the height of the element relative to the base of the flap when the flap is in its upright orientation. See page 23, lines 18. By making the width of the flap second layer to be less than the width of the recited portion of the medial surface of the flap first layer, the flap first layer takes on a laterally inward angled orientation relative to the inner layer (e.g., the liner) of the article in the upright orientation of the flap.

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As shown in Fig. 3 of the '813 reference, the circulation band (14) is spaced from the medial surface of the strip (24) from the base of the flap to the distal end of the flap (e.g., at location S as identified in the drawings provided with the Office action). Thus, the width of that portion of the medial surface of the strip (24) along which the circulation band (14) is free from fixed engagement extends from the base (e.g. at 16) of the strip to the distal end of the strip (e.g., at point S). The width of the circulation band (14) (e.g., the flap second layer) in opposed relation to the medial surface of the strip (24) extends from the base of the flap (e.g. at 12) to the distal end of the flap (e.g., at point S) and is clearly greater than the width of the strip (24). Thus, the '813 reference fails to show or otherwise suggest a flap second layer having a width less than a width of a portion of a flap first layer as recited in new claim 36.

St. Louis et al. also fail to disclose such a feature. Specifically, the fabric layer (176) overlaying the barrier layer (174) is clearly of the same or greater length (e.g., width) as the barrier layer. There is no disclosure in St. Louis et al. suggesting that the fabric layer length be shorter than that of the barrier layer. Consequently, St. Louis et al. also fail to show or suggest a flap second layer having a width less than a width of a portion of a flap first layer as recited in new claim 36.

Since each of the references fails to show or suggest this feature, a combination of the references similarly fails to show or suggest such a feature.

The other references of record also fail to show or suggest all of the elements recited in claim 36.

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For these reasons, claim 36 is submitted to be patentable over the references of record.

Claims 3, 4, 8-13, 16-19 and 33, and new claim 39, depend directly or indirectly from new claim 36 and are submitted to be patentable over the references of record for the same reasons as claim 36.

Claim 37

New claim 37 is directed to an absorbent article for personal wear comprising, *inter alia*:

an inner layer . . .;

an outer layer . . .;

an absorbent body disposed between the inner layer and the outer layer . . .; and

a pair of containment flaps . . . each comprising:

a first layer extending from the base of the flap to the distal end of said flap, said flap first layer having a lateral surface and a medial surface; and

a liquid permeable second layer in opposed relation with the medial surface of the flap first layer, said flap second layer being free from fixed engagement with at least a portion of the medial surface of said flap first layer to define a surge chamber therebetween for receiving liquid body waste, said flap second layer being secured to the medial surface at a first seam therebetween generally at the distal end of the flap and being further secured to the medial surface at a second seam spaced from said first seam, said portion of the medial surface of the flap first layer extending between the first seam and the second seam, said liquid permeable portion of the inner layer of

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said article being interposed between the surge chamber and the absorbent body of said article.

New claim 37 corresponds generally to original claim 5 rewritten in independent form. Original claim 5 was indicated in the Office action as being allowable if rewritten in independent form. However, applicants note that new claim 37 lacks the recitation (from original claim 1) that each flap is secured to the inner layer of the article since it is believed that such a recitation is unnecessary to the patentability of the claim.

Claims 6 and 7 are amended herein to depend from new claim 37 and were also indicated in the Office action as being allowable.

Claim 38

New claim 38 is generally similar to original claim 14 and is directed to a disposable absorbent article for personal wear comprising, *inter alia*:

an inner layer . . .;

an outer layer . . .;

an absorbent body disposed between the inner layer and the outer layer . . .; and

a pair of containment flaps . . . each comprising:

a first layer extending from the base of the flap to the distal end of said flap, said flap first layer having a lateral surface and a medial surface; and

a liquid permeable second layer in opposed relation with the medial surface of the flap first layer, said flap second layer being free from fixed engagement with at least a portion of the medial surface of said flap first

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layer to define a surge chamber therebetween for receiving liquid body waste, said flap second layer also being secured to the medial surface at least at one location therebetween, the flap second layer further extending in opposed relationship with at least a portion of the lateral surface of the flap first layer intermediate the base of the flap and the distal end of the flap and being secured to the lateral surface of the flap first layer at least at one location therebetween.

New claim 38 is submitted to patentable over the references of record, and in particular the '813 reference, St. Louis et al., and U.S. Patent No. 5,624,426 (Roe et al.), in that whether considered alone or in combination the references fail to show or suggest the combination of features recited in new claim 38 including that each flap comprises a flap first layer and a flap second layer secured to a medial surface of the flap first layer and forming a surge chamber therebetween, and further overlaying a portion of the lateral surface of the flap first layer and being secured the lateral surface of the flap first layer.

As shown in Fig. 3 of the '813 reference, the circulation band (14) overlays the lateral surface (designated L in the marked-up drawings provided with the Office action) and is secured thereto. However, it is clear from the same figure that the circulation band (14) is nowhere secured to the medial surface (designated M in the marked-up drawings provided with the Office action). Moreover, there is no suggestion found anywhere in the '813 reference to secure the circulation band to both the medial and lateral surfaces.

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Applicants also reiterate their position set forth above in connection with claim 28 that there is no teaching found in either the '813 reference or St. Louis et al. that would motivate one skilled in the art to combine the references. Specifically, St. Louis et al. teaches overlaying the barrier layer with the fabric layer whereby no surge chamber is formed. In contrast, the '813 reference teaches spacing the circulation band from the inner facing surface of the strip to define an aeration tunnel therebetween. Thus, a combination of St. Louis et al. and the '813 reference cannot be made without doing express violence to the teachings of the '813 reference (i.e., eliminating the aeration tunnel specifically taught by the '813 reference).

Roe et al. disclose a diaper having an improved leg cuff comprising (with reference to Fig. 2 of Roe et al. as relied upon in item 1 of the Office action) an outer wall (82) and an inner wall (81) secured to each other at outer ends thereof and otherwise spaced from each other to form a channel therebetween (designated C in the marked-up drawings accompanying the Office action). While the drawings show the outer end of the inner wall overlaying and secured to the outer end of the outer wall, Roe et al. disclose that the outer end of the outer wall could overlay and be secured to the outer end of the inner wall. However, there is no disclosure or suggestion found anywhere in Roe et al. for securing the inner wall to both a lateral surface and a medial surface of the outer wall. Thus Roe et al. fail to show or suggest a flap second layer secured to both a lateral surface and medial surface of a flap first layer as recited in new claim 38.

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Claim 15, as amended, and new claim 41 depend directly from new claim 38 and are submitted to be patentable over the references of record for the same reasons as claim 38.

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V. Conclusion

In view of the foregoing, favorable consideration and allowance of claims 3, 4, 6-13, 15-25 and 27-41 as now presented is respectfully requested.

Respectfully submitted,



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